

Appl. No.: 10/523,190  
Amdt. dated January 5, 2007  
Reply to Office Action of December 7, 2006

Amendments to the Drawings:

Applicant has submitted a Replacement Sheet 1/4 to make a correction to Figure 1, to replace the crank reference "32" with new reference "33", commensurate with the amendments to the specification.

### **REMARKS/ARGUMENTS**

Claims 1-9 are now pending. Claim 10 has been canceled without prejudice.

The drawings were objected to because reference character “32” has been used to designate both the crank and the pump. Applicant has amended the specification and drawings, as noted, to correct these errors.

Claims 1, 7, 8, and 10 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,267,535 to Luo. Claims 2-6 and 9 were indicated to be patentable in subject matter.

Applicant appreciates the Examiner’s thorough review of the application and the indication of allowable subject matter in Claims 2-6 and 9. However, for the reasons below, it is submitted that all pending claims are patentable.

The Office Action bases the rejections on the premise that Luo’s gas return port 7 is the same as the transfer port as claimed. However, this is incorrect. As known in the art of reciprocating engines, and particularly two-stroke engines, the “transfer port” is the port through which a fresh fuel/air charge is fed into the cylinder. Luo’s gas return port 7 is not used for feeding a fresh fuel/air charge into the cylinder. Instead, Luo’s engine uses the transfer port 6 for feeding the fresh charge (col. 2, lines 56-58).

Applicant has amended Claim 1 to explicitly indicate the function of the transfer port.

The problem to which Luo is directed is that some portion of the fresh charge can escape through the exhaust port 10. The gas return port 7 and valve 4 are provided to return this escaped charge back to the crankcase. Luo does not address the problem to which the present invention is directed, nor does it suggest the solution as claimed.

Because Luo’s transfer port 6 and exhaust port 10 are not at least partially coincident as required by Claim 1, Luo does not anticipate Claim 1.

Even if the port 7 of Luo were the transfer port, Luo still would not anticipate Claim 1. Luo's gas return port 7 and the exhaust port 10 are entirely separate. See Figure 1 from Luo below, in which the valve 4 has been deleted for clarity:

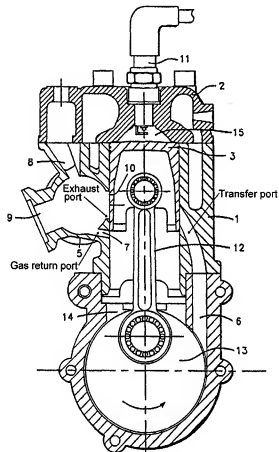


FIG. -1

It is clear that the ports 7 and 10 are not at least partially coincident.

Therefore, because Luo fails to teach or suggest an engine in which the exhaust port and transfer port are at least partially coincident, the rejections under 35 U.S.C. 102(b) are erroneous and should be withdrawn.

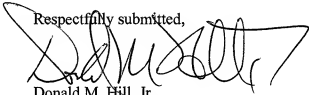
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Conclusion

Based on the above amendments and remarks, it is submitted that the application is in condition for allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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